

FIG. 1

Set-up

FIG. 2

Examine method
block for method type

~202

(SNI Method)

Obtain function
pointer from method
block

~204

Pass pointers to arguments
in Java stack;
Pass pointer to method
block pointer to function;
Pass execution environment
pointer to function.

~206

SNI Method executes

~208

END

FIG. 3

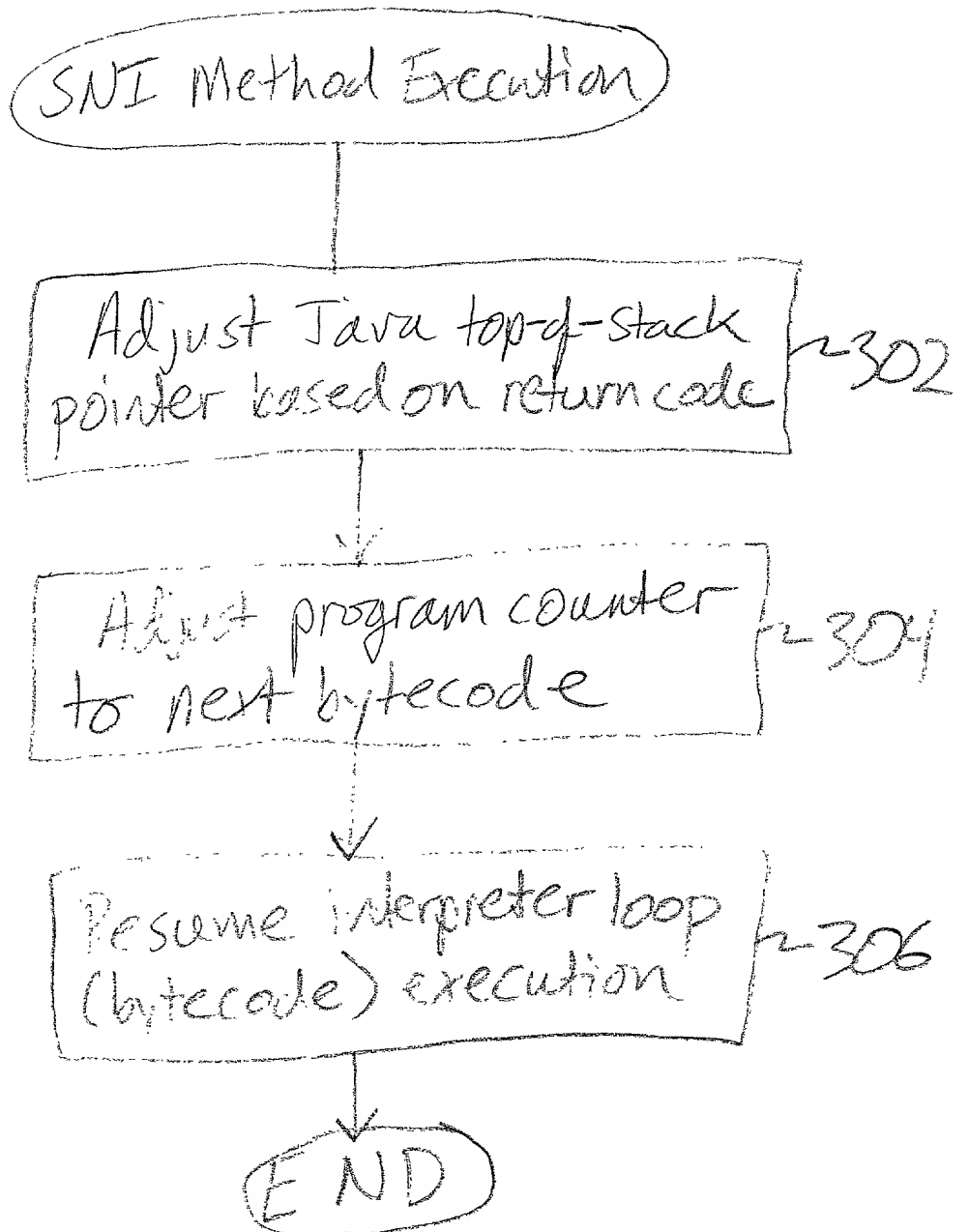


FIG. 4

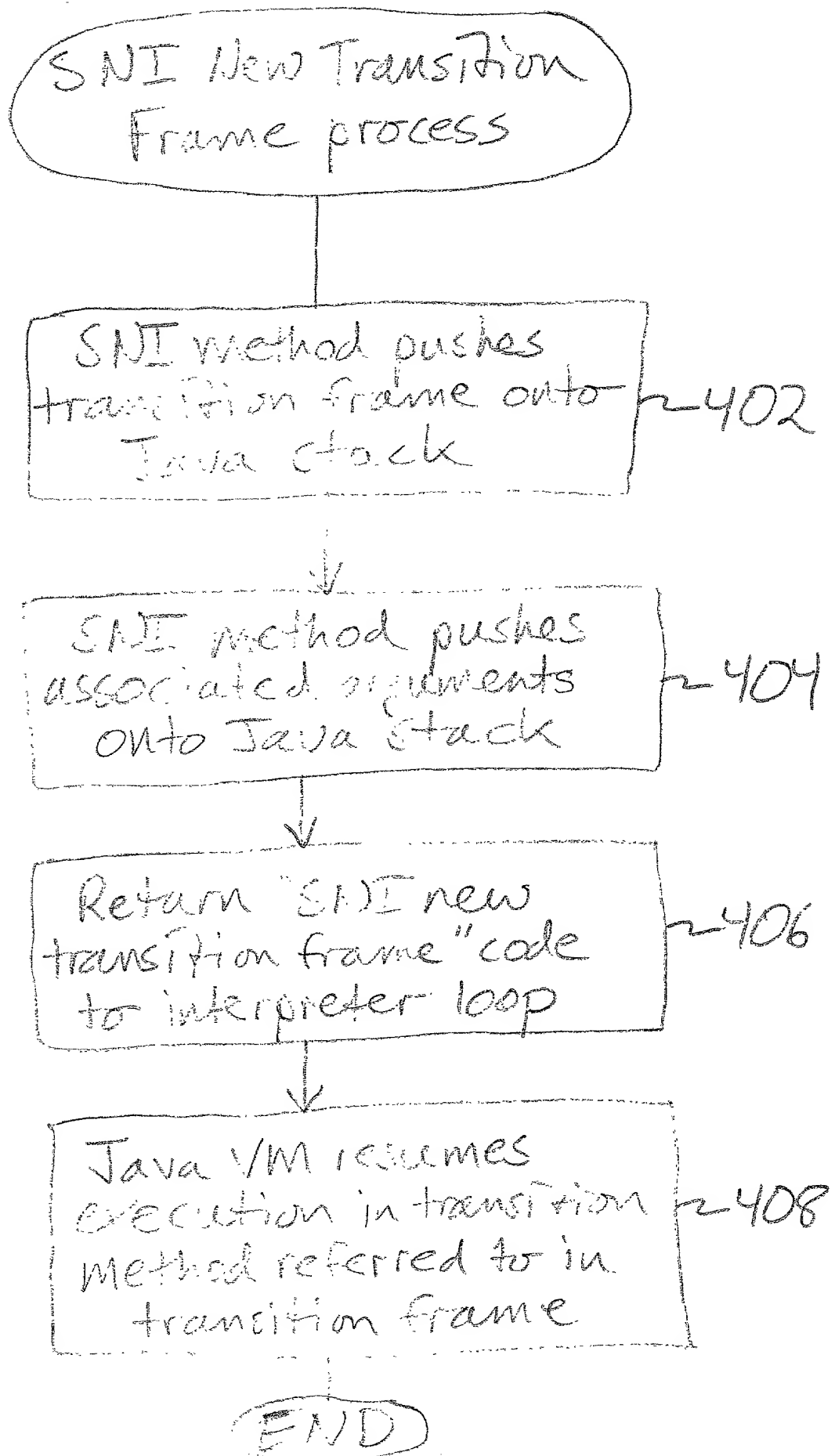


FIG. 5A

SNI New Method
Block Process

SNI method determines
which method block to
invoke

~502

Store pointer to method
block in pointer argument

~504

Push new arguments for
SNI method onto Java
Stack

~506

Return SNI new method
block

~508

A

0985963 032501
T05230 0965960

FIG. 5B

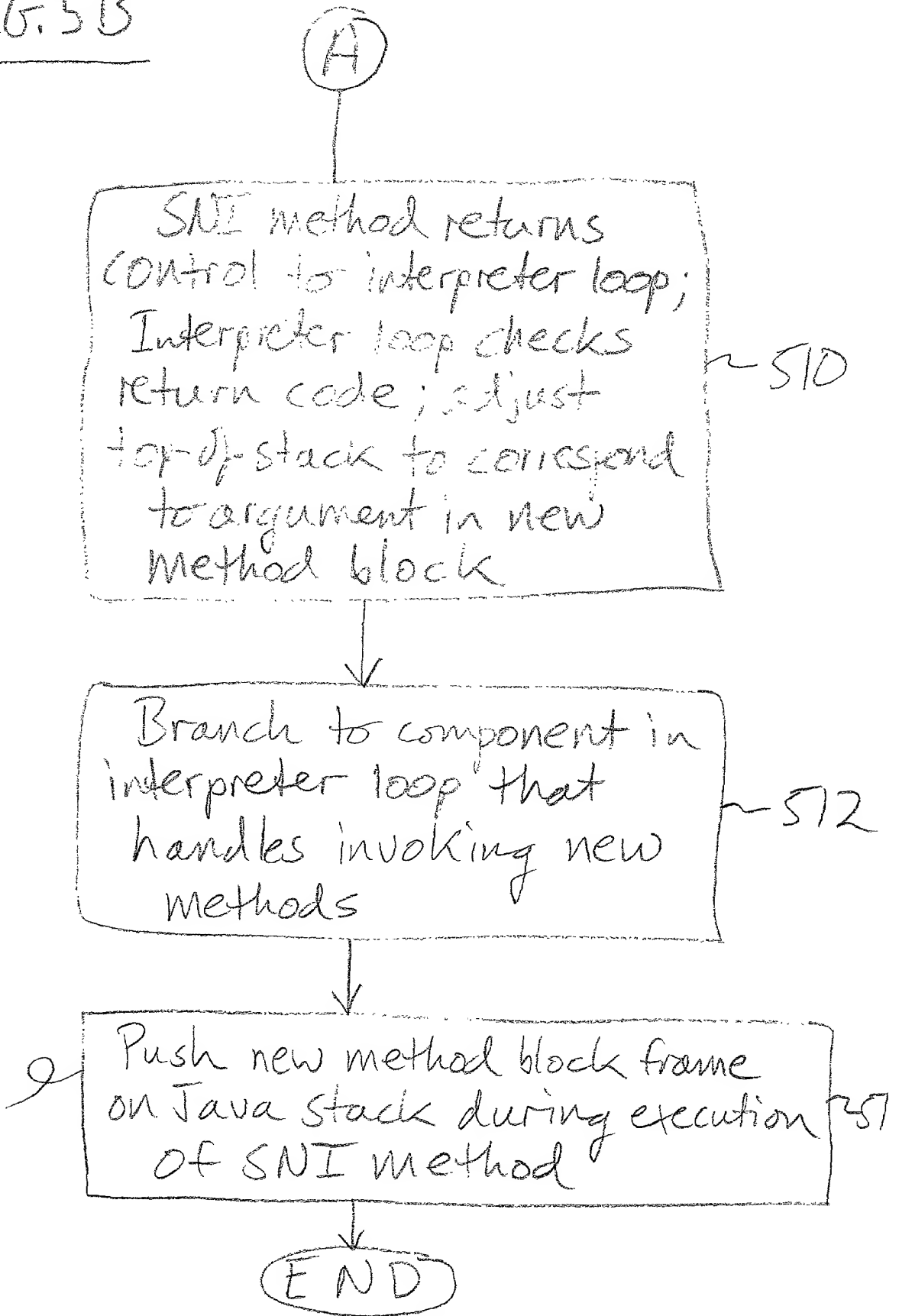


FIG. 6 is a block diagram of a system 600 for executing source code. The system 600 includes a compile-time environment 609 and a runtime environment 613. The compile-time environment 609 includes a source code 601, a bytecode compiler 603, and bytecodes 605. The runtime environment 613 includes a compiler 615, an interpreter 617, a runtime system 619, and an operating system 621. The source code 601 is processed by the bytecode compiler 603 to produce bytecodes 605. The bytecodes 605 are then processed by the compiler 615, the interpreter 617, and the runtime system 619 within the runtime environment 613. The runtime system 619 interacts with the operating system 621.

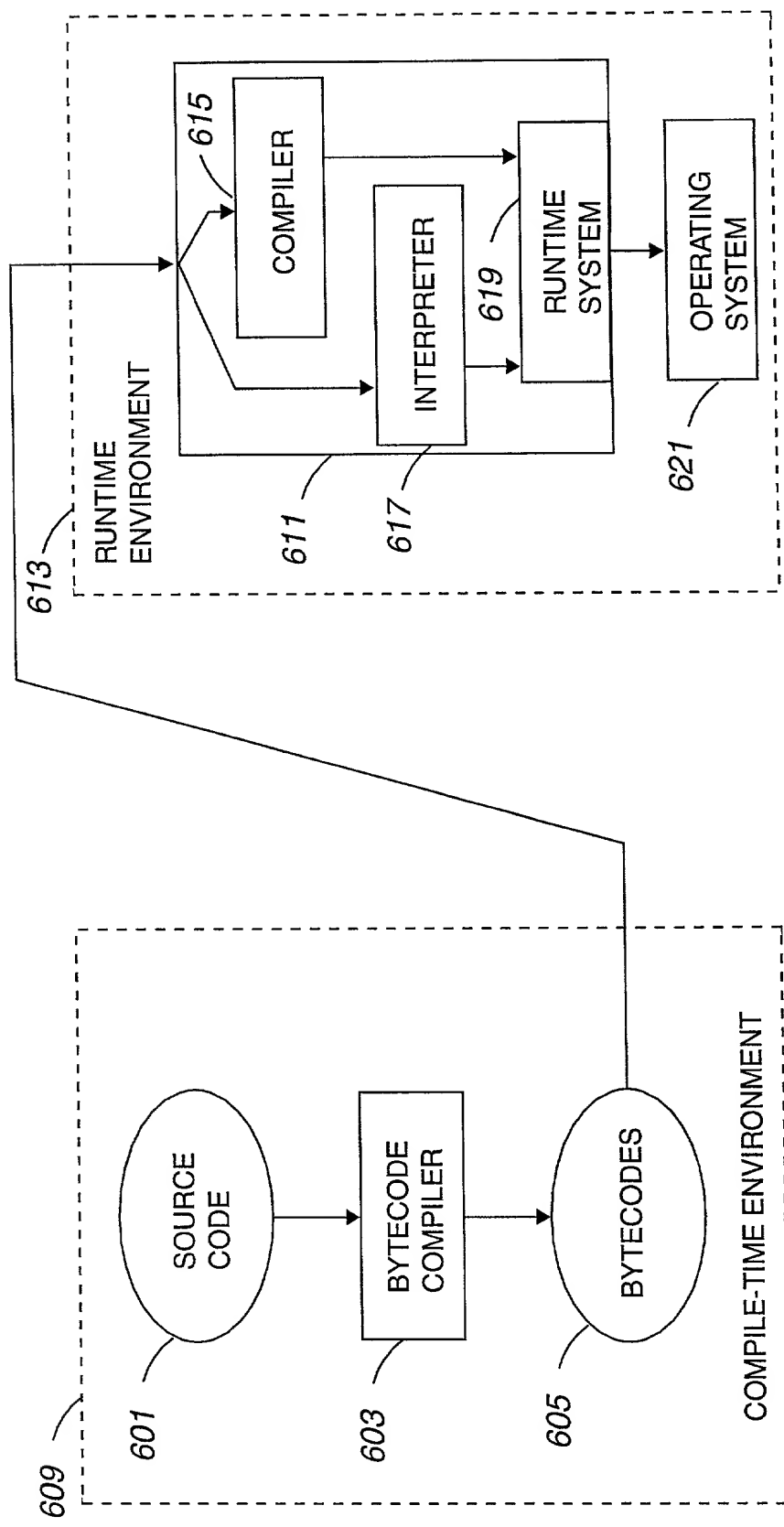


FIG. 6

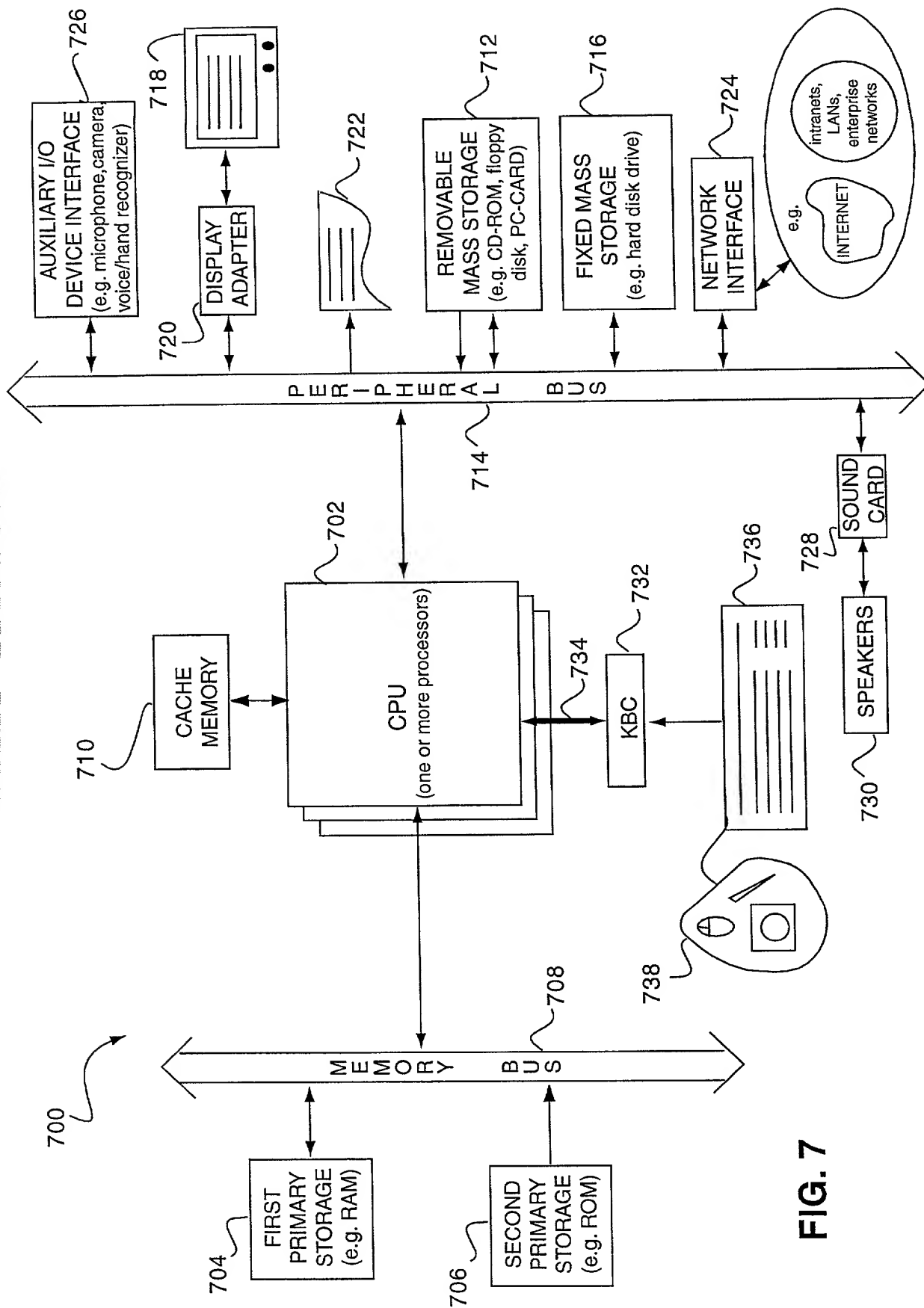


FIG. 7